Economies of scale

Economics

Economies of scale are the cost savings an organization get as it produces more products. It can be defined as decrease in cost per unit as output increases. (Samuelson, 2006) Economies of scale arise when a business increases the scale of production but keeping its fixed costs the same. These benefits are important since businesses can earn a higher margin on their sales just by increasing the scale of operations. These benefits can be realized through internal and external economies of scale.

Internal economies of scale arises when business purchase in bulk, mass produce, increase the scale of operations but controlling the fixed cost and by utilizing the learning curve to get better and more efficient over time. External economies of scale are realized when external factors such astechnology, infrastructure, employee skills and support from industry improve. (Samuelson, 2006) However where expansion can lead to economies of scale, expansion more than necessary can lead to diseconomies of scale. Expansion of customer base can lead to bigger distribution area and hence more cost.

Expansion of output can lead to incurring additional fixed costs. Managerial inefficiencies, over-hiring or deteriorating infrastructure can all lead to diseconomies of scale. Therefore increase in scope and scale can be beneficial to an extent and after that boundary is crossed, diseconomies of scale will arise. (Heakal, 2009) The above diagram will help explain how economies of scale will lead to lower cost per unit. The curve shows that when the quantity of output increases from Q to Q2, the average cost per unit goes down from C to C1.

However when the output increases further from the Q2 point, the cost rises again as shown in the curve. This construction of this curve can be better explained by the scenario below: A factory incurs $5000 fixed cost and incurs $5 per chair they produce. When the factory produces 100 chairs, their cost will be 5 x 100 + 5000 = $5500. Therefore the average cost of one chair at this output will be 5500/100 = $55 If however the factory increases the output to 200 chairs, their total cost will be 5 x 200 + 5000 = $6000.

Therefore the average cost of one chair at this output will be 6000/200 = $30 The difference is clear that at a lower production level of 100 chairs, the average price per chair would have been $55 but at the increase production level of 200 chairs the average cost per chair is $30. This is the benefit of economies of scale. This example can be further extended to show diseconomies of scale. Let’s assume that the organization wants to produce 500 chairs but has only a capacity of 200 chairs. So the organization invests in extra machinery that cost $10000.

Now the cost incurred to produce 500 chairs would be 5 x 500 + 10000 + 5000 = 17500. Therefore the average cost of one chair at this output will be 17500/500 = $35 which is a greater cost than the one the company could have gotten if they have produced just 200 chairs.

References

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